Ph.D. Management, Competitiveness and Development

Scuola Superiore Sant'Anna
di Studi Universitari e di Perfezionamento

Management Accounting: contents and issues

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April, 9th 2010

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Management Accounting

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Management Accounting Information (1 of 5)

- The institute of Management Accountants has recently (2008) defined management accounting as:
  - ***a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy.***

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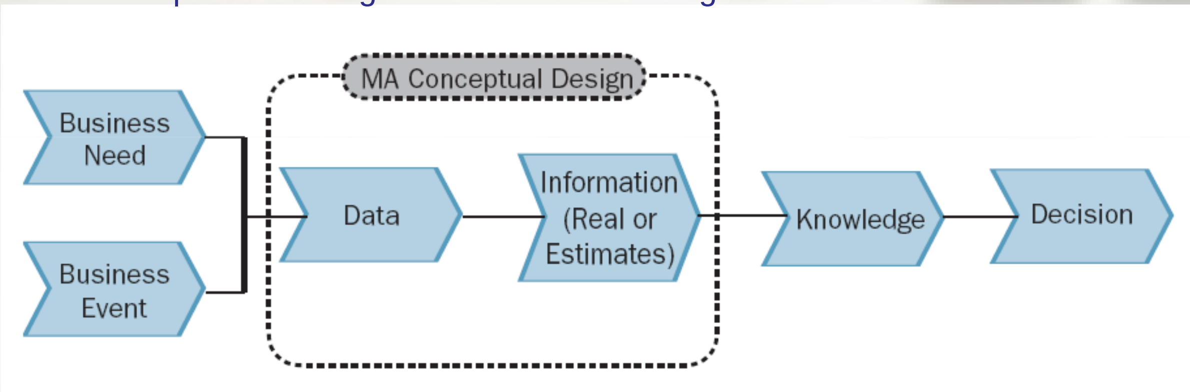
Management Accounting Information (2 of 5)

The traditional role of management accountants as information providers is often described and interpreted as being centered on the lower end of the value chain.

The role of the management accountant must be more diverse across this value chain, and it must include the very highest level—participating in key strategic decisions as part of management decision-making teams.



The role for management accountants has therefore shifted in two respects with regard to the information value chain. Management accountants:
(1) provide the conceptual framework for converting data into information and
(2) fulfill the role of enabler and strategic business partner along the entire information value chain.

Management Accounting Information (3 of 5)

- Be aware that this definition identifies:
  - Management accounting as providing both financial information and nonfinancial information
  - The role of management information as supporting strategic (planning), operational (operating) and control (performance evaluation) management decision making
- In short, management accounting information is pervasive and purposeful
  - It is intended to meet specific decision-making needs at all levels in the organization

Management Accounting Information (4 of 5)

- Examples of management accounting information include:
  - The reported expense of an operating department, such as the assembly department of an automobile plant or an electronics company
  - The costs of producing a product
  - The cost of delivering a service
  - The cost of performing an activity or business process – such as creating a customer invoice
  - The costs of serving a customer

Management Accounting Information (5 of 5)

- Management accounting also produces measures of the economic performance of decentralized operating units, such as:
  - Business units
  - Divisions
  - Departments
- These measures help senior managers assess the performance of the company's decentralized units

Changing Focus

- Traditionally, management accounting information has been financial information
  - Denominated in a currency such as $ (dollars), £ (pound sterling), ¥ (yen), or € (euro)
- Management accounting information has now expanded to encompass information that is operational or physical (nonfinancial) information:
  - Quality and process times
  - More subjective measurements, such as:
    - Customer satisfaction
    - Employee capabilities
    - New product performance

Financial v. Management Accounting

Financial Accounting

- Communicates economic information to individuals and organizations that are external to the direct operations of the company
- Stresses the form in which it is communicated
- Is based on historical information

Management Accounting

- Provides information to managers and employees within the organization
- Allows great discretion to design systems that provide information for helping employees and managers make decisions
- Forward looking

A Brief History (1 of 9)

- The earliest management accountants were scribes whose job was to record the receipt and disbursements of cash and to provide an accounting of the current stock of wealth including valuable ores and foods
  - Considerable evidence of scribes in early Babylon, Greece, and during the era of the Roman Empire
  - In Egypt, during the time of the Pharaohs, the treasurer, who was the head scribe, occupied the most senior administrative position in the empire, responsible for managing all aspects of the Pharaohs' wealth
- This treasury role for management accountants was virtually the same until medieval England

A Brief History (2 of 9)

- In medieval England, producers (the Guilds) kept detailed records of raw materials and labor costs as evidence of product quality
  - Change of focus from measuring wealth to providing a basis for quality assurance
  - Still, the role was primarily recording the assets
- From 1400-1600, the rudiments of basic modern management accounting practice emerged
  - They included notions of standards for materials use, employee productivity, job costing forms, and budgets
  - Management accounting became more decision oriented and supported decisions relating to building or retiring fixed assets, managing costs, and product pricing

A Brief History (3 of 9)

- In 19th century America, textile mill owners kept detailed records of costs to direct efficiency improvement activities and to provide a basis for product pricing
  - But there was little or no standardized management accounting practice
- Then, in 1885, Henry Metcalf published

Cost of Manufacturers

A Brief History (4 of 9)

- In the late 19th century, railroad managers implemented large and complex costing systems
  - Allowed them to compute the costs of the different types of freight that they carried
  - Supported efficiency improvements and pricing in the railroads
- The railroads were the first modern industry to develop and use broad financial statistics to assess organization performance
- About the same time, Andrew Carnegie was developing detailed records of the cost of materials and labor used to make the steel produced in his steel mills

A Brief History (5 of 9)

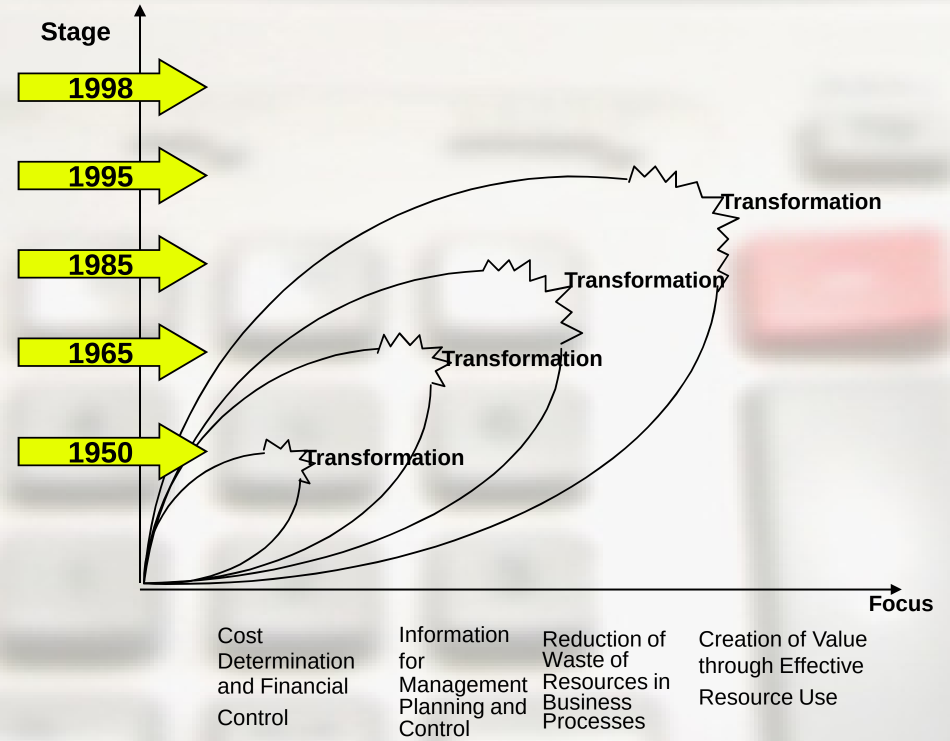
- Carnegie was highly effective in reducing costs and unsentimental in closing mills that he felt were irretrievably inefficient

- The emergence of large and integrated companies at the start of the 20th century created a demand for measuring the performance of different organizational units
  - DuPont and General Motors are examples
- Managers developed ways to measure the return on investment and the performance of their units (more on this later)

A Brief History (6 of 9)

- After the late 1920s management accounting development stalled
  - Accounting interest focused on preparing financial statements to meet new regulatory requirements
- It was only in the 1970s that interest returned to developing more effective management accounting systems
  - American and European companies were under intense pressure from Japanese automobile manufacturers
- During the latter part of the 20th century there were innovations in costing and performance measurement systems

A Brief History (7 of 9)



A Brief History (8 of 9)

- The history of management accounting comprises two characteristics:

1. Management accounting was driven by the evolution of organizations and their strategic imperatives
   - When cost control was the goal, costing systems became more accurate
   - When the ability of organizations to adapt and change to environmental changes became important, management accounting systems that supported adaptability were developed

A Brief History (9 of 9)

2. Management accounting innovations have usually been developed by managers to address their own decision-making needs
   – Management accounting needs to be both pragmatic and add value to the organization

Financial Information and Financial Control

Role of Financial Information

- Financial information pervades our economy
  - It is the primary means of communication between profit seeking organizations and their stakeholders
  - For this reason organizations use financial measures internally as a broad indicator of performance
- This financial information provides a signal that ***something*** is wrong, but not ***what*** is wrong
- Financial information summarizes underlying activities
  - But to explain financial results, managers need to dig deeper
  - Detailed information provides additional insight into what is happening to profits

Financial Control

- As previously stated, an organization can use financial and nonfinancial information to monitor the organization's ability to deliver its chosen value proposition
- At a higher level, however, organizations use broad measures of financial performance to assess the overall success of the organization's chosen strategies
- This approach to evaluating aggregate performance is called ***financial control***

Origins in 20th-Century Enterprises

- Many innovations in financial control systems occurred in the early decades of the twentieth century to support the growth of multiple-division diversified corporations
  - E.g., DuPont and General Motors
- As the DuPont Company expanded, it had to:
  - Acquire raw materials from many different suppliers
  - Process these materials through many production stages in several different types of plants
  - Produce a diversified mix of chemical products that were bought by companies in many different industries

Financial Control at DuPont

- The senior executives of the diversified DuPont Company devised techniques to coordinate operating activities in their different divisions:
  - An operating budget
    - The document that forecasts revenues and expenses during the next operating period, including monthly forecasts of sales, production, and operating expenses
  - A capital budget
    - The document that authorizes spending for resources with multiyear useful lives (capital assets)
  - The vital return on investment (ROI) performance measure developed by Donaldson Brown, the chief financial officer (CFO) of DuPont

ROI: The DuPont Formula

- The ROI calculation gave DuPont executives a single number to evaluate the performance of their operating divisions and decide which of their divisions should receive additional capital to expand capacity
- The ROI measure combined a profitability measure with a capital intensity measure to produce return on investment or ROI
  - Profitability Measure:
    = Operating income/Sales
  - Asset or Capital Utilization Measure:
    = Sales/Investment

$$\text{ROI} = \frac{\text{operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{investment}}$$

The issues in contemporary Management Accounting

Anthony A. Atkinson A, Kaplan S., Matsumura E.M., Young S.M., Management Accounting, 5/E

1. Management Accounting: Information that Creates Value.
2. Cost Management Concepts and Cost Behavior.
3. Traditional Cost Management Systems.
4. Activity-Based Cost Management Systems.
5. Management Accounting Information for Activity and Process decisions.
6. Cost Information for Pricing and Product Planning.
7. Management Accounting and Control Systems: Assessing performance over the Value Chain.
8. Motivating Behavior in Management Accounting and Control Systems.
9. The Balanced Scorecard.
10. Using Budgets to Achieve Organizational Objectives.
11. Capital Budgeting -Long-Term Assets
12. Financial Control.

MA & Control in Service Organizations

Management Accounting and Control in Service Organizations

- The major changes in the demand for management accounting and control information experienced by manufacturing companies in recent years have also occurred in virtually all types of service organizations
- Service companies have existed for hundreds of years
- Their importance in modern economies has increased substantially during the twentieth century

Service Companies (1 of 2)

- Service companies differ from manufacturing companies in several ways
  - Obvious difference: service companies do not produce a tangible product
  - Less obvious: many employees in service companies have direct contact with customers
- Service companies must be especially sensitive to the timeliness and quality of the service that their employees provide to customers

Service Companies (2 of 2)

- Customers of service companies immediately notice defects and delays in service delivery
  - The consequences from such defects can be severe
    - Dissatisfied customers usually choose alternative suppliers after an unhappy experience
    - They also usually tell others about their bad experience

Service Companies' Use of Management Accounting Information

- Managers in service companies have historically used management accounting information far less intensively than managers in manufacturing companies
- Such a lack of accurate information about the cost of operations probably occurred because many service organizations operated in noncompetitive markets
  - Either highly regulated or government owned
    - E.g., national railroads, airlines, postal services, and telecommunications companies
  - Others, such as local retailers, were subject only to local, not national or global, competition

Lack of Competition

- In a noncompetitive environments, managers of service companies were not under great pressure to:
  - Lower costs
  - Improve the quality and efficiency of operations
  - Introduce new products that made profits
  - Eliminate products and services that were incurring losses
- Accordingly, there was little demand from them for information to help them make decisions on those issues
- Management accounting systems in most service organizations were simple, designed to allow managers to:
  - Budget expenses by operating department
  - Measure and monitor actual spending against these functional departmental budgets

Competitive Environment (1 of 2)

- The competitive environment has now become far more challenging and demanding for both manufacturing and service companies
  - Accordingly, companies now demand better management accounting information
- Starting in the mid-1970s, manufacturing companies in North America and Europe encountered severe competition from Asian companies that offered higher-quality products at lower prices
- Before long it was not sufficient for a company to have cost and quality parity against its domestic competitors
- A company could survive and prosper only if its costs, quality, and product capabilities were as good as those of the best companies in the world

Competitive Environment (2 of 2)

- The ground rules under which many service companies operate have completely changed
  - The deregulation movement in North America and Europe since the 1970s
  - The switch from centrally controlled socialist economies to free market economies in much of the world
- Managers of service companies now require accurate, timely information:
  - To improve the quality, timeliness, and efficiency of the activities they perform
  - To make decisions about their individual products, services, and customers

Public Sector and Nonprofit Organizations

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Public Sector

- Government and nonprofit organizations as well as profit-seeking enterprises are feeling the pressures for improved performance
- Citizens are demanding more responsive and more efficient performance from their local, regional, and national governments
- In managing public organizations and programs, cost information is essential in the following five areas:
  - Budgeting and cost control,
  - Performance measurement,
  - Determining reimbursements and setting fees and prices,
  - Program evaluations, and
  - Making economic choice decisions
- The demands for cost information in government will be identical to those in for-profit manufacturing and service companies

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Nonprofit Organizations (1 of 2)

- Nonprofit organizations are also feeling the pressure for cost and performance measurement
- There has been explosive growth in nongovernmental organizations dealing with:
  - Economic development
  - The environment
  - Poverty
  - Illiteracy
  - Hunger and malnutrition
  - Public and private health
  - Social services and the arts

Nonprofit Organizations (2 of 2)

- These organizations compete for funds from governments, foundations, and private individuals
- Increasingly the public and private donors are demanding accountability from the organizations they fund, including measures of effectiveness
  - Are the organizations achieving their intended purpose and measures of efficiency?
  - Are they using their resources productively?
- Managers of all types of nonprofit organizations are looking to adapt management accounting procedures, developed in the private sector, to meet the demands placed on them for accountability and cost and performance measurement

Financial & Nonfinancial Information in Government and Not for Profit Organizations (1 of 2)

- The objectives of customers should be the objectives of the organization
- In innovative government and not-for-profit organizations, managers use nonfinancial and financial performance measures to evaluate how well and how efficiently these organizations use their funds to provide services to their customers

Financial & Nonfinancial Information in Government and Not for Profit Organizations (2 of 2)

- Governments and not-for-profits need to look at the processes they use to deliver services to their customers to verify that these processes meet customer requirements at the lowest possible cost
  - For example, what is the best way to approach training for an individual who is chronically unemployed so that the person's needs are met at the lowest cost to society?

Behavioral Implication of MA

Behavioral Implications (1 of 4)

- As measurements are made on operations and especially on individuals and groups, their behavior changes
  - People react when they are being measured, and they react to the measurements
  - They focus on the variables and behavior being measured and spend less attention on those not measured
- Two old sayings recognize these phenomena:
  - "What gets measured gets managed"
  - "If I can't measure it, I can't manage it."

Behavioral Implications (2 of 4)

- People familiar with the current system may resist as managers attempt to introduce or redesign cost and performance measurement systems
- They have acquired expertise in the use (and, perhaps, misuse) of the old system and wonder whether their experience and expertise will apply to the new system
- People also may feel committed to the decisions based on the information the old system produced
  - Actions taken may no longer seem valid based on the information produced by a newly installed management accounting system
  - A new management system can be a threat or lead to embarrassment and may lead to a resistance to change

Behavioral Implications (3 of 4)

- Management accountants must understand and anticipate the reactions of individuals to information and measurements
- An analysis of the behavioral and organizational reactions to the measurements must accompany the design and introduction of new measurements and systems
- More importantly, when the measurements are used not only for information, planning, and decision-making but also for control, evaluation, and reward, employees and managers place great pressure on the measurements themselves

Behavioral Implications (4 of 4)

- Managers and employees may take unexpected and undesirable actions to influence their score on the performance measure
- For example, managers seeking to improve current bonuses based on reported profits may skip discretionary expenditures that may improve performance in future periods
  - Preventive maintenance
  - Research and development
  - Advertising

Meeting the Challenge

Meeting the Challenge (1 of 3)

- Management accounting has become an exciting discipline that is undergoing major changes to reflect the challenging new environment that organizations worldwide now face
- This presentation has introduced the need for organizations to develop and use appropriate financial and nonfinancial information in a Management Accounting System that will:

1. Focus on aggregate, usually financial, measures of performance in for-profit organizations that provide an overall summary of performance, and the ability of the organization to meet its financial objectives

Meeting the Challenge (2 of 3)

- In government and not-for-profit organizations the focus will be on the organization's performance in meeting the needs of their citizens or clients

2. Focus on the organization's success in meeting its customers' requirements in for-profit organizations so that the organization can react promptly to failures in delivering the value proposition (what the organization tries to deliver to customers)
    - In public sector and not-for-profit organizations focus on the cost to deliver services to customers and to monitor and improve process efficiency
3. Enable all organizations to identify process improvements needed to improve the organization's ability to deliver its value proposition

Meeting the Challenge (3 of 3)

4. Enable all organizations to identify the potential of the organization's members to manage and improve process performance
5. Enable the for profit organization to assess the profitability and desirability of continued investment in various entities such as products, product lines, departments, and organization units
6. Enable the organization to motivate, monitor, and detect noncompliance with inappropriate organization behavior

Textbooks

- Atkinson, Kaplan, Matsumura and Young, *Management Accounting*, 5th ed., Prentice Hall, 2007
- Horngren, Datar, Foster, Rajan and Ittner, *Cost Accounting – A managerial emphasis*, 13th ed. Prentice Hall, 2008
- Garrison, Noreen, Brewer, *Managerial Accounting*, 12th ed., McGraw-Hill, 2008